Date: Mon, 25 Apr 94 01:03:45 PDT

From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>

Errors-To: Info-Hams-Errors@UCSD.Edu

Reply-To: Info-Hams@UCSD.Edu

Precedence: Bulk

Subject: Info-Hams Digest V94 #455

To: Info-Hams

Info-Hams Digest Mon, 25 Apr 94 Volume 94 : Issue 455

Today's Topics:

Amateur Radio Newsline #871 22 Apr 94 Callserver CARS

> Dangerous RF/Microwave fields SWR & Power Loss (2 msgs) Yaesu FT-530 - MANUAL

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu> Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu> Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: Sun, 24 Apr 1994 19:39:33 MDT

From: ihnp4.ucsd.edu!library.ucla.edu!psgrain!nntp.cs.ubc.ca!alberta!ve6mgs!

usenet@network.ucsd.edu

Subject: Amateur Radio Newsline #871 22 Apr 94

To: info-hams@ucsd.edu

The electronic publication of the Amateur Radio Newsline is distributed with the permission of Bill Pasternak, WA6ITF, President and Editor of Newsline. The text version is edited from the original scripts and transcribed from the audio reports by Dale Cary, WD0AKO, and is first published in The Radio & Electronics Round Table on the Genie Online System.

If you have any comment, suggestion, or news item you would like to submit, send them via E-Mail to 3241437@mcimail.com or B.PASTERNAK@genie.geis.com. You can contact Newsline at +1 805-296-7180. It is a combination answering and FAX machine, if you have a FAX to send, wait for the voice prompt and

press your fax-send button.

All other information and disclaimers are in the text header below.

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NEWSLINE RADIO - CBBS EDITION #121 - POSTED 04/23/94

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The following is late news about Amateur Radio for Radio Amateurs as prepared from NEWSLINE RADIO scripts by the staff of the AMATEUR RADIO NEWSLINE, INC. -- formerly the WESTLINK RADIO NETWORK. For current information updates, please call

Audio Version of Newsline

Los Angeles	(213)	462-0008
Los Angeles (Instant Update Line)	(805)	296-2407
Seattle	(206)	368-3969
Seattle	(206)	281-8455
Tacoma	(206)	927-7373
Louisville	(502)	894-8559
Dayton	(513)	275-9991
Chicago	(708)	289-0423
New York City	(718)	353-2801
Melbourne, FL	(407)	259-4479

Electronic Hardcopy Version of Newsline

GEnie (RTC Bulletin Board)	m345;1
GEnie (File Library)	m345;3
Dallas Remote Imaging BBS (DRIG)	(214) 492-7573
In bulletin number 36	
The Midwest Connection BBS	(701) 239-2440

For the latest breaking info call the Instant Update Line listed above. To provide information please call (805) 296-7180. This line answers automatically and will accept up to 30 minutes of material.

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For further information about the AMATEUR RADIO NEWSLINE, please write to us with an SASE at P.O. Box 463, Pasadena, CA 91102.

Thank You, NEWSLINE

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Some of the hams of NEWSLINE RADIO...

WA6ITF WB6MQV WB6FDF K6DUE W6RCL N6AHU N6AWE N6TCQ K6PGX N6PNY KU8R N8DTN W9JUV KC9RP K9XI KB5KCH KC5UD KC0HF G8AUU WD0AKO DJ0QN and many others in the United States and around the globe!!!

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[871]

The following is a QST

Can a new Fairness Doctrine impact on ham radio and will the ARRL get its way on vanity call signs? Find out on Newsline report number 871!

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HAM RADIO AND THE FAIRNESS DOCTRINE

Bowing to extensive White House demands, congress is again

pressuring the FCC to reinstate the "fairness doctrine" and to expand it past its original intent. Because of the latter some hams want Amateur Radio discussion groups included. Heres the story.

The fairness doctrine was an FCC regulation repealed in 1987 which required broadcasters to air both sides of a controversial issue. According to a report in the trade publication Daily Variety, a Federal Communications Commission staffer confirmed the agency is getting "heat" from Capitol Hill on the issue, although the aide would not identify the lawmakers involved. Radio - Television News Directors Association president David Bartlett asserts that the pressure is coming from Rep. John Dingell. Dinghall is the powerful Democratic chairman of the House Energy and Commerce Committee and is believed to be acting in concert with the president and his staff.

Not reported in Variety is a strange Amateur Radio connection in all of this. It now seems that several hams involved in long running 75 and 20 meter debate net activities believe it is important to include on-the-air amateur Radio discussions under the terms of any new Fairness Doctrine. Anyone listening above 3850 KHz or 14.300 MHz is already aware that this small but vocal group of hams feel that they have a constitutional right to have their views on various issues known to all of Amateur Radio using their ham stations as a broadcast platform. Some are already believed to be lobbying their local congressional representatives for inclusion of private radio service communications in any new Fairness Doctrine legislation.

In 1987, the FCC under then-chairman Dennis Patrick repealed the fairness doctrine on grounds that it could no longer be justified in an era of cable TV and other burgeoning media outlets. A congressional effort to codify the regulation died when proponents failed to muster enough votes to override President Reagan's veto.

Most congressional observers expected Congress would easily reinstate the rule following the election of President Clinton in 1992. But the effort died last year after Rush Limbaugh and other radio talk show hosts engineered a well-organized effort to kill the proposal. If the Fairness Doctrine is ever reinstated, the inclusion of Amateur Radio and other personal communications services is doubtful because none fall under the purview of any broadcast related FCC rules. But that does not seem to be enough of a reason to convince proponents of including ham radio communications in a new Fairness Doctrine from trying. Stay tuned. This one is not over yet.

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Over the past several weeks Newsline has reported on legal action by Southern California's Claremont Amateur Radio Association to bar several radio amateurs from the clubs repeaters. One of the people who was the target of a CLARA restraining order is Drew Feldman, N3KSO. Newsline had the opportunity to talk to Feldman to get his perspective on the legal action taken against him. The comments that follow express Feldman's point of view.

Interestingly Feldman is not as upset with the Clarmont Amateur Radio Club as he is with the attorney that is representing the organization, Sid Radus, N6OMS.

"The first order of business of Southern California's Repeater Coordinating Committee was to close a repeater that had been coordinated open going on two decades. The repeater, high level, blanketing most of southern California with great coverage was originally coordinated properly open. But with no consideration for its large user group, its own rules, the FCC guidelines, no notice of this action was taken by Sid Radus, the new TASMA President. This is the same Sidney Radus that brought hams to court in an attempt to control the user group of the very same machine. A conflict of interest is obvious. I'm one of two amateurs that as of late has been caught up in this mess. There have been three cases prior, and I know of two more scheduled in the near future." Drew Feldman, N3KSO.

Obviously Feldman's point of view differs from that of the Claremont Amateur Radio Club and is members. He is aware of the mistake made by the court in accepting an older version of section 97.113 in denying a change of venue request. Its now up to him and Anthony Cardines, WA6IGJ to go forward with any appeal.

A more in-depth interview with N3KSO has been conducted by RAIN Producer Hap Holly, KC9RP. That report will be on the RAIN Dial-Up in a few weeks.

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CANADIAN AMATEUR RADIO REALIGNMENT

What would you say if you learned that the FCC was going to delegate the overall administration of the United States Amateur Radio Service to the American Radio Relay League, the National Amateur Radio Association or maybe even Sears Roebuck? You would probably be more than a bit shocked. So imagine the way hams in Canada must be feeling after learning that the Canadian government and the national society Radio Amateurs Canada have formed a working group aimed at turning the administration of the Canadian Amateur Radio Service over to the national society.

According to Fred Maia's W5YI Report, if the details are worked

out and approved by Parliament, Radio Amateurs in Canada could wind up managing the certification and documentation of all aspects of the service, the examination and licensing of all applicants for ham radio licenses and overall control of the Amateur Radio spectrum within Canada and its possessions. In fact, word out of Ottawa is that the government is even considering delegating every aspect of the Canadian Amateur Radio service to Radio Amateurs of Canada. This would give the RAC wide ranging pseudo government powers to maintain examination questions, approve amateur service examiners, issue call signs and perform Amateur Radio spectrum surveillance to assure that all Canadian hams were abiding by the service rules. Such an agreement would also give the Radio Amateurs of Canada exclusivity in the publishing and distribution of all documents related to the Canadian Amateur Radio service.

The working group is expected to take at least a year before it arrives at any definitive agreement. If an accord can be reached it could set an example that other nations may emulate, worldwide.

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ARRL DEVELOPS VANITY CALL PROPOSAL

The ARRL's Executive Committee has approved the recommendations of the Ad Hoc Committee on Preferred Call Signs in preparation for the ARRL's filing of formal comments in PR Docket 93-305, the FCC's Vanity call sign proposal.

The committee report says that all amateurs should be eligible for participation in the program. A phase-in period and priority system of what the League calls gates should be adopted to allow the Commission relief from the administrative burden expected from the heavy initial submission of applications, and to afford licensees the opportunity to regain lost call signs. Included in the first gate would be those who wish to obtain the call sign of a direct family member. Clubs with lapsed club licenses and call signs should be allowed to recoup those call signs in the first priority group. The second gate in the priority system would be opened to Extra Class licensees; a priority third gate would be opened to Advanced Class licensees. The League says it will also recommend that one by one prefix call signs be made available for limited duration special events that are of national significance.

The April 6th recommendations were based on membership input solicited by the committee. A copy of the committee's complete report is available for an SASE from the Regulatory Information Branch at League Headquarters, and on electronic services including CompuServe, America On Line, Prodigy, and the ARRL Bulletin Board.

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ARRL SEEKS CLUB CALL SIGN RULING

The ARRL has also petitioned the FCC to increase the minimum number of members necessary for granting a club station license from two to four. The League says that the FCC's 1993 notice of proposed rule making to reinstitute club licensing makes this a timely issue.

In 1990, the League, as part of a petition for rule making seeking miscellaneous changes in the Amateur Service Rules, proposed the same change. At the time, no club station licenses were being issued, but the League said that if that program was resumed, the two-person criteria would invite applications from parties that are not clubs, such as two or three licensees simply wanting an alternative call sign.

The League believes that the two-person criterion is insufficient to distinguish bona fide clubs from two or three individuals who do not function as a normal Amateur Radio club. By way of example league says that of 1,957 Amateur Radio clubs that are ARRL-affiliated, only 10 have fewer than four members.

Until 1976, the FCC required an application for a club station license to file copies of the club's constitution and bylaws, which helped ensure that the club was bona fide. But the FCC has not issued club station licenses since 1979. So the commission declined to change the criteria, since new club licenses were not being issued.

The Leagues request has designated as RM-8462.

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ARRL BEGINS LICENSE RENEWAL SERVICE

The ARRL has now begun mailing amateur radio license expiration notices to its members. The notices, including an envelope addressed to the FCC's processing facility in Gettysburg, PA, are sent 90 days before the license expiration date and are generated from the official FCC database. All addresses are being cross checked with the ARRL membership database and the QST magazine mailing address is used if it is different from the address in the FCC database. This the League says is being done for both accuracy and to insure prompt delivery.

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SHACK AND THE HAMVENTION

Now for an update on next weeks Dayton Hamvention starting with word that Radio Shack for the first time ever it is recognizing this very popular ham radio event. An advertisement page 22 of the latest Radio Shack flyer heralds a banner

proclaiming "Dayton Hamvention Ham Convention Specials." It also invites readers to --and we quote -- "Plan to visit the worlds largest and most famous Ham gathering, the Dayton Hamvention with its Giant Flea market, exhibits and activities for the family taking place April 29, 30 and May 1 at the HARA Arena, Dayton Ohio." Radio Shack also offers their popular 2 meter and 70 cm hand-held FM transceivers at substantial savings off their usual prices.

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PACKET CLUSTER DESIGNER TO RECEIVE AWARD

One ham who is definitely going to be at next weeks Dayton Hamvention is Dick Newell, AK1A. Newell and his Packet Cluster software have become a staple on the VHF and UHF bands worldwide. As a result Newell is the winner of this years Dayton Amateur Radio Associations Technical Achievement Award.

Mr. Newell is being recognized for his efforts in amateur radio through the creation of the packet cluster concept. As well as the software that supports it. AK1A first started working on the packet cluster concept in 1986.

"I designed the protocol to talk, to hook these computers up together. They exchange information with each other and send what nodes that are connected to each station, which users are currently connected to the system. And then when somebody does an announcement or DX spot it gets distributed to each node. Then the node is responsible and the software sends it to all the users that are locally connected to that node." Dick Newell, AK1A.

Packet cluster has grown from just a small number of computers linked together.

"The number of amateurs that use packet cluster all the time is probably between 35,000 to 40,000 amateurs." Dick Newell, AK1A.

Mr Newell was humbled and surprised by the award.

"I was completely surprised, I had no idea that I was even being considered. I consider it a very big honor. That is all I can say. I was very surprised." Dick Newell, AK1A.

Dick Newell, AK1A will receive the 1994 Technical Excellence Award at the Grand Banquet to be held Saturday evening, April the 30th at the Dayton Convention Center located in downtown Dayton.

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"The World of FM and Repeaters" is a new monthly column by Newsline producer Bill Pasternak, WA6ITF premiering in the May issue of Worldradio News. According to Pasternak, he was enticed into writing the column after it was pointed out to him that no publication other than QST Magazine was devoting any regular page-space to the largest sub-group within the United States Amateur Radio service.

Pasternak says that the Worldradio FM and repeater column will not be a rehash of his old "Looking West" that ran 22 years in 73 Magazine. Instead Bill says that he will use the world-wide news gathering potential of Newsline to procure timely information that is vital to the day to day on-air operations of all FMers, repeater licensees, system owners and repeater users. The column will also solicit original articles and papers from prominent FMers, repeater groups and frequency coordination councils. You can meet Bill at the Worldradio News booth at next weeks Dayton Hamvention. He will also be hosting two forum sessions at Hamvention '94 as well.

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TONY ENGLAND, WOORE TO SPEAK AT QCWA DINNER

Former NASA Astronaut Tony England, WOORE, will be the keynote speaker at the Southwest Ohio QCWA dinner in Dayton, Ohio on Friday, April the 29th. The event also takes place Hamvention weekend at the Continental restaurant which is located about a half mile west of Interstate 75 on State Route 725. The dinner gathering begins at 7:30 PM.

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RUSSIAN TIMES

The Russians are really taking to electronic mail in a big way. The March 9 New York Times notes in a story that Russians are taking to e-mail in a big way, some of them even being able to access the Internet. "We can use the Library of Congress in five minutes, while it takes a magazine from the US three months to reach Russia," a Russian scientist said.

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 $\mathsf{D}\mathsf{X}$

In DX, word that the Radio Society of Great Britain has scheduled its 1994 International HF and Islands on the Air Convention for October 7 to 9, 1994. Included this year is a 30th birthday party for IOTA. The convention will be held at the Beaumont Conference Centre in Old Windsor, Berkshire. More than a

dozen speakers already have signed on, including Peter Casier, ON6TT, one of the 3YOPI Peter I Island expedition operators, and Roger Western, G3SXW/ZD9SXW. For more information, contact E. N. Cheadle, G3NUG, Further Felden, Longcroft Lane, Felden, Hemel Hempstead, Herts HP3 OBN.

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VANITY CALLS

When amateur radio operators get the go-ahead to request vanity callsigns... one radio club already has a particular call sign in mind. Members of wars -- West Alabama Amateur Radio Society, will ask the FCC to grant W4WYN as the club's new call sign. It's the Club's way of paying tribute to a special amateur radio operator: Don McDaniel. McDaniel was a driving force in amateur radio in Tuscaloosa, Alabama, for many years. He was a close friend of many wars members -- and was very active in public service. In fact, McDaniel was always one of the first to volunteer, any time emergencies arose. WARS members say having W4WYN as their club call sign would be a fitting tribute to Don McDaniel... an amateur radio operator admired by all who knew him.

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And for this week, that's all from the Amateur Radio Newsline. You can write to us at Post Office Box 463, Pasadena, CA 91102.

Next week a full report on planned activities at Hamvention 94. Please check it out.

(* * * Newsline Copyright 1994 all rights are reserved. * * *

Date: 25 Apr 94 06:41:26 GMT From: news-mail-gateway@ucsd.edu

Subject: Callserver

To: info-hams@ucsd.edu

The callserver that I have found to have the lastest database (~NOV 93) is Telnet to pc.usl.edu port 2000

This will get you there direct, type help for on-line commands...

- -

Date: Sun, 24 Apr 1994 01:57:42 GMT

From: ihnp4.ucsd.edu!swrinde!sgiblab!wetware!spunky.RedBrick.COM!psinntp!psinntp!

pool!utdp@network.ucsd.edu

Subject: CARS

To: info-hams@ucsd.edu

I would like to know what cars don't like ham radio equipment....the following I am considering purchasing:

Saturn SL0 Saturn SL2 Escort GT Dodge Shadow

I have heard of car coimputers going wild when operators key their mike

- -

Date: 25 Apr 1994 02:56:05 -0400

From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!europa.eng.gtefsd.com!

news.ans.net!hp81.prod.aol.net!search01.news.aol.com!not-for-mail@network.ucsd.edu

Subject: Dangerous RF/Microwave fields

To: info-hams@ucsd.edu

In article <kludgeCopwDJ.CEI@netcom.com>, kludge@netcom.com (Scott Dorsey)
writes:

>Does anyone know what is considered dangerous RF and Microwave signals. >Somehow I remember that between 100K and 30GHz your not suppose to expose >human's to more than 194V/meter (the spec could have been either an ANSI, >IEEE, or OSHA spec).

Unfortunately I don't recall the precise spec, but there is a current ANSI limitation that is frequency selective, specified in both mW/cm2 and V/m. I believe it's ANSI C95.1 (1992). An article referring to same appeared in the last two years of the Proceedings of the IEEE (sorry for the precision, but I can't find the article in my pile of xeroxed stuff!)

The old OSHA standard was 194 V/m (which translates to 10mW/cm2 FAR FIELD), frequency independent. That spec was revised to correspond with the human bodies increased absorption of EMag between 300MHz and 3 GHz. In some cases (if memory serves) the new spec is 20 dB more stringent than the old. nx7u@aol.com

Date: Mon, 25 Apr 1994 03:47:40 GMT

From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!gatech!kd4nc!ke4zv!

gary@network.ucsd.edu
Subject: SWR & Power Loss
To: info-hams@ucsd.edu

In article <2pf3ma\$f16@bones.et.byu.edu> haymoree@newt.ee.byu.edu (Ed Haymore)
writes:

>Here's a question that's been bothering me for some time -- an article >in April's QST reminded me of it.

>This article, and other material I've seen, pooh-pooh the idea of a low >SWR. (Maybe I should preface this by saying I'm not a 1:1 SWR fanatic, >though. :-) These articles say that as long as you have low-loss cable, >most of the energy bouncing back and forth between the transmitter and >the antenna ends up going out the antenna anyway.

>My question is: since the transmitter is matched to the line, why does >the reflected energy coming from the antenna get reflected again at the >transmitter? Why isn't it all (or mostly) absorbed in the finals?

The finals are not a *load*. The line is matched to the final's "load line" which is a mathematical fiction used to describe the device's *output* impedance. That impedance is simply E/I for the stage. It's not a resistor. The transmitter is a source, not a sink. Consider a fire hose, try spitting *into* an operating fire hose. How much of your spit gets flung right back in your face?

Gary

Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

Date: 25 Apr 1994 03:11:15 -0400

From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!europa.eng.gtefsd.com!

news.ans.net!hp81.prod.aol.net!search01.news.aol.com!not-for-mail@network.ucsd.edu

Subject: SWR & Power Loss To: info-hams@ucsd.edu

In article <1994Apr25.034740.8791@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) writes:

>This article, and other material I've seen, pooh-pooh the idea of a low >SWR. (Maybe I should preface this by saying I'm not a 1:1 SWR fanatic, >though. :-) These articles say that as long as you have low-loss cable, >most of the energy bouncing back and forth between the transmitter and >the antenna ends up going out the antenna anyway.

>My question is: since the transmitter is matched to the line, why does >the reflected energy coming from the antenna get reflected again at the >transmitter? Why isn't it all (or mostly) absorbed in the finals?

Well it depends. The precise scenario you describe is correct (I believe)--if the final amp is really Z0 ohms output feeding a transmission line of z0 ohms characteristic impedance, then any reverse travelling wave sees no mismatch at that junction, and that power is absorbed by the amplifier and essentially converted to heat.

Which would explain why your fan on that solid-state rig runs harder when you're delivering into a crappy load :-)

If there is a tuner involved it's a different story. The tuner establishes a conjugate match at the amp/line junction, so there *is* a mismatch there. Reflected energy re-reflected from the amp/line junction, and any power not reflected is again dissipated in the amp as heat. The point of the conjugate match is to insure that the re-reflected voltage appears essentially in phase with the original incident voltage to maximize the power transfer. The problem with using the tuner at the TX output is that the SWR of the line can cause additive heat losses in the coax beyond the nominal dB/100' specification. This occurs because at current peaks in the standing wave on the coax, there's more I2R loss. Although the SWR has to get pretty high (like 10:1) for this phenomenon to have much effect.

Date: 25 Apr 1994 02:29:33 GMT

From: ihnp4.ucsd.edu!swrinde!gatech!newsxfer.itd.umich.edu!news1.oakland.edu!

vela.acs.oakland.edu!prvalko@network.ucsd.edu

Subject: Yaesu FT-530 - MANUAL

To: info-hams@ucsd.edu

- 1) Dial in the freq you want to memorize.
- 2) hit the FUNC button
- 3) use up/down button or the tuning knob to select a memory channel
- 4) hit the MR button.

the rig will also store power info, rpt offset, and PL freqs.

opps.

vi and I don't get along.... 73 wb8zjl

End of Info-Hams Digest V94 #455 ***********